IN THE CLAIMS

What is claimed is:

1.   A program viewing unit, comprising:

a source of content in scrambled format;

a conditional access unit that de-scrambles the content such that the

content is in a clear format; and

a switching unit, coupled to the demodulator unit and the conditional

access unit, that routes the program data with the content in the scrambled

format and the program data with the content in the clear format in response to

instructions from a central processing unit.

2.   The program viewing unit of Claim 1, wherein the source is selected from

the group consisting of demodulator, re-scrambler, conditional access unit, and

package media-reader.

3.   The program viewing unit of Claim 1, wherein the switching unit

comprises a multiplexer.

4.   The program viewing unit of Claim 1, wherein the switching unit routes

the program data with the content in the scrambled format to the conditional

access unit.

5.   The program viewing unit of Claim 1, further comprising an encoding

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unit, coupled to the switching unit, that encodes the program data with the content in the clear format before transmitting the program data with the content in the clear format to a display unit.

6.   The program viewing unit of Claim 1, further comprising an encoding unit, coupled to the switching unit, that transmits the program data with the content in the scrambled format to a recording device.

7.   The program viewing unit of Claim 1, further comprising a de-multiplexing unit, coupled to the switching unit, that transmits the program data with the content in the clear format to a viewing unit.

8.   The program viewing unit of Claim 7, wherein the program data in clear format is first encoded prior to transmittal to the viewing unit.

9.   The program viewing unit of Claim 8, wherein the encoding is selected from the group consisting of Digital Transmission Copy Protection (DTCP), watermark, and High Bandwidth Digital Copy Protection (HDCP).

10.   A program viewing unit, comprising:

        a demodulator unit that outputs program data with content in a first scrambled format;

        a de-scrambler that de-scrambles the program data with content in the first scrambled format into content in a first clear format; and

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a re-scrambler that re-scrambles the content in the first clear format into content in a second scrambled format.

11.   The program viewing unit of Claim 10, wherein the re-scrambler uses a local key.

12.   The program viewing unit of Claim 11, wherein the local key is generated in part by using the copy protection status of the content.

13.   The program viewing unit of Claim 11, wherein the local key is generated in part by using keys that are downloaded from a service operator.

14.   The program viewing unit of Claim 13, wherein the service operator is selected from the group consisting of cable operator, telephone operator, Internet operator, broadcaster, and Direct Broadcast Satellite (DBS).

15.   The program viewing unit of Claim 11, wherein the local key is generated in part by using embedded keys from the re-scrambler.

16.   The program viewing unit of Claim 10, wherein the de-scrambler is controlled by a conditional access mechanism coupled to receive information, wherein the information is selected from the group consisting of ordering information, billing information, payment information, credit information, sponsor

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information, preview information, viewer information, and parental control information.

17. The program viewing unit of Claim 10, wherein the re-scrambler is coupled to receive information on copy generation management.

18. The program viewing unit of Claim 10, further comprising a second descrambler coupled to receive content in the second scrambled format and output content in a second clear format.

19. The program viewing unit of Claim 18, further comprising a switching unit coupled to receive an input and communicate the input to a display unit, wherein the input is the content in the first clear format or the content in the second clear format.

20. A program viewing unit, comprising:

a central processing unit (CPU);

a demodulator unit;

a conditional access unit;

a de-multiplexer unit;

an encoding unit; and

a switching unit, coupled to the CPU, the demodulator unit, the conditional access unit, the de-multiplexer unit, and the encoding unit that is programmable

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by the CPU to route program data between the demodulator unit, the conditional access unit, the de-multiplexer unit, and the encoding unit.

21. The program viewing unit of Claim 20, wherein the program viewing unit further comprises a re-scrambler and a descrambler which is coupled to the switching unit.

22. The program viewing unit of Claim 20, wherein the conditional access unit comprises:

a processor unit; and

a de-scrambler unit.

23. A method for managing program data, comprising:

transmitting the program data to a switch; and

selecting the switch to transmit the data to one of a de-multiplexing unit, a conditional access unit, and an encoding unit.

24. The method of Claim 23 wherein the switch can additionally transmit data to one of a re-scrambler and a descrambler.

25. The method of Claim 23, wherein the selecting is performed by a central processing unit.

26. The method of Claim 23, wherein the program data is transmitted from a demodulating unit.

27.   An apparatus for managing program data, comprising:

means for transmitting the program data to a switch; and

means for selecting the switch to transmit the data to one of a de-

multiplexing unit, a conditional access unit, and an encoding unit.

28. A machine-readable medium having stored thereon instructions, which when

executed by a processor, causes said processor to perform the following:

transmit program data to a switch; and

select the switch to transmit the program data to one of a de-multiplexing

unit, a conditional access unit, and an encoding unit.